

Illinois Environmental Protection Agency

Public Notice

Exceptional Events Demonstration

Illinois Portion of the Chicago-Naperville, Illinois-Indiana-Wisconsin (IL-IN-WI) 2008 8-Hour Ozone Nonattainment Area

The Illinois Environmental Protection Agency (“Illinois EPA”) Bureau of Air is accepting comments on the draft “Wildfire Exceptional Events Demonstration for Ground-Level Ozone in the Chicago 2008 Ozone Nonattainment Area” (“Exceptional Events Demonstration” or “Demonstration”). This Exceptional Events Demonstration will be submitted to the United States Environmental Protection Agency (“USEPA”) in accordance with Section 319 of the Clean Air Act and 40 CFR 50.14, and referenced as the “Northbrook June 2020 Wildfire Smoke Event.”

On March 27, 2008, USEPA revised the primary National Ambient Air Quality Standard (“NAAQS”) for ozone to 0.075 for the 8-hour standard and revised the secondary standard to be identical to the primary standard. Based on certified, quality-assured air monitoring data for calendar years 2009 to 2011, USEPA designated the Illinois counties of Cook, DuPage, Kane, Lake, McHenry, and Will, as well as Aux Sable and Goose Lake Townships in Grundy County and Oswego Township in Kendall County, as nonattainment for the 2008 Ozone NAAQS. Together with the Indiana counties of Lake and Porter, and Pleasant Prairie Township and Somers Township in Kenosha County, Wisconsin, the area was identified as the Chicago-Naperville IL-IN-WI nonattainment area (“Chicago NAA”). The Exceptional Events Demonstration addresses two days of ambient ozone monitoring data at the Northbrook Water Plant monitoring site within the Chicago NAA.

In accordance with Section 319 of the Clean Air Act and with 40 CFR 50.14(c)(3)(iv), the Demonstration includes: (1) a narrative conceptual model that describes the events causing the exceedance or violation and a discussion of how emissions from the events led to the exceedance or violation at the affected monitor; (2) a demonstration that the event affected air quality in such a way that there exists a clear causal relationship between the specific event and the monitored exceedance or violation; (3) analyses comparing the claimed event-influenced concentrations to concentrations at the same monitoring site at other times to support the requirement at 40 CFR 50.14(c)(3)(iv)(B); (4) a demonstration that the event was both not reasonably controllable and not reasonably preventable; and (5) a demonstration that the event was a human activity that is unlikely to recur at a particular location or was a natural event.

The Lake Michigan Air Directors Consortium (“LADCO”), of which Illinois is a member, contracted Alpine Geophysics, LLC (“Alpine”) of Burnsville, NC, to investigate the exceptional events in question, along with other similar events that may have impacted other LADCO member states. Alpine performed all of the required analyses and demonstrations listed above, which establish that the exceptional events impacted the Northbrook ozone monitor in a regulatorily significant manner, and drafted the Exceptional Events Demonstration document that is the subject of this public notice, on Illinois EPA’s behalf. That Exceptional Events Demonstration document contains all required elements of an exceptional events demonstration

to support a determination by the USEPA Administrator that the data in question was impacted by wildfire smoke and thus should be excluded from regulatory determinations.

The Exceptional Events Demonstration illustrates the regulatory significance of the ozone data and presents the narrative conceptual model detailing the scale of the wildfire events that occurred in 2020, including the path of the plumes of smoke from several Arizona wildfires to the area of the monitor in Illinois on the specified dates. The Demonstration shows how this smoke, having traveled to the area higher up in the atmosphere, was introduced into the lower atmosphere where it impacted the monitor in question on those dates. The document establishes a clear causal relationship between the wildfire events and the elevated ozone monitor measurements by presenting evidence of the transport of the fire emissions to the monitor, and evidence from other pollutants and alternate species recorded in the area at the time showing that the smoke emissions affected the monitor in question on those dates. The Demonstration also shows that the event-influenced concentrations measured on those dates were irregular when compared to other measurements at other times at the monitor in question. Further, the Demonstration describes how the wildfires were “natural events” that were not reasonably controllable, nor were they reasonably preventable.

This notice and comment period follows the requirements of the Exceptional Events Rule [40 CFR 50.14(c)(3)(v)], which requires the Agency to “Document that the State followed the public comment process and that the comment period was open for a minimum of 30 days.” The Illinois EPA will follow the Exceptional Events Rule further requirements that at the end of the comment period, Illinois EPA “Submit the public comments it received along with its demonstration to the Administrator” and “Address in the submission to the Administrator those comments disputing or contradicting factual evidence provided in the demonstration.”

The Illinois EPA is accepting written comments regarding the draft Demonstration, which can be found on the Agency’s website at <https://www2.illinois.gov/epa/public-notices/Pages/general-notices.aspx>. Written comments must be received by the Illinois EPA by 11:59 p.m., January 20, 2021, and should be directed to Brad Frost, Office of Community Relations, Illinois Environmental Protection Agency, 1021 North Grand Ave. East P.O. Box 19506, Springfield, IL 62794-9506, phone 217/782-7027, TDD phone number 866/273-5488, brad.frost@illinois.gov.